§ 56.85–15 Postheat treatment.

(a) Where pressure retaining components having different thicknesses are welded together as is often the case when making branch connections, the preheat and postheat treatment requirements of Table 56.85–10 apply to the thicker of the components being joined. Postweld heat treatment is required for Classes I, I-L, II-L, and systems. It is not required for Class II piping. Refer to § 56.50–105(a)(3) for exceptions in Classes I-L and II-L systems and to paragraph (b) of this section for Class I systems.

(b) All buttwelded joints in Class I piping shall be postweld heated as required by Table 56.85–10. The following exceptions are permitted:

(1) High pressure salt water piping systems used in tank cleaning operations; and,

(2) Gas supply piping of carbon or carbon molybdenum steel used in gas turbines.

(c) All complicated connections including manifolds shall be stress-relieved in a furnace as a whole as required by Table 56.85–10 before being taken aboard ship for installation.

(d) The postheating treatment selected for parts of an assembly must not adversely affect other components. Heating a fabricated assembly as a complete unit is usually desirable; however, the size or shape of the unit or the adverse effect of a desired treatment on one or more components where dissimilar materials are involved may dictate alternative procedures. For example, it may be heated as a section of the assembly before the attachment of others or local circumferential-band heating of welded joints in accordance with 46 CFR 56.85–10, Table 56.85–10 Note (12) and 46 CFR 56.85–15(j)(3).

(e) Postheating treatment of welded joints between dissimilar metals having different postheating requirements must be established in the qualified welding procedure.

(f)–(h) [Reserved]

(i) For those materials listed under P–1, when the wall thickness of the thicker of the two abutting ends, after their preparation, is less than three-fourths inch, the weld needs no postheating treatment. In all cases, where the nominal wall thickness is three-fourths inch or less, postheating treatment is not required.

(j) (1)–(2) [Reserved]

(3) In local postheat treatment the entire band must be brought up to uniform specified temperature over the complete circumference of the pipe section, with a gradual diminishing of the temperature outward from the edges of the band.

[CGFR 68–82, 33 FR 18843, Dec. 18, 1968, as amended by CGD 72–206R, 38 FR 17229, June 29, 1973; CGD 73–254, 40 FR 40167, Sept. 2, 1975; USCG–2003–16630, 73 FR 65185, Oct. 31, 2008]

Subpart 56.90—Assembly

§ 56.90–1 General.

(a) The assembly of the various piping components, whether done in a shop or as field erection, shall be done so that the completely erected piping conforms with the requirements of the regulations in this subchapter and with the specified requirements of the engineering design.

§ 56.90–5 Bolting procedure.

(a) All flanged joints shall be fitted up so that the gasket contact faces bear uniformly on the gasket and then shall be made up with relatively uniform bolt stress. Bolt loading and gasket compression need only be verified by touch and visual observation.

(b) When bolting gasketed flanged joints, the gasket must be properly compressed in accordance with the design principles applicable to the type of gasket used.

(c) Steel to cast iron flanged joints shall be assembled with care to prevent damage to the cast iron flange in accordance with § 56.25–10.

(d) All bolts must be engaged so that there is visible evidence of complete threading through the nut or threaded attachment.

[CGFR 68–82, 33 FR 18843, Dec. 18, 1968, as amended by USCG–2003–16630, 73 FR 65185, Oct. 31, 2008]

§ 56.90–10 Threaded piping (modifies 135.5).

(a) Any compound or lubricant used in threaded joints shall be suitable for the service conditions and shall not